



RME Fireface UCX II

USB Audio & MIDI Interface

The UCX II packs 25 years' interface design experience into half a rack space.

SAM INGLIS

Throughout their 25-year history, RME have championed a consistent design philosophy. They have maintained a relentless focus on driver quality, reliability and product longevity. They've also been quick to embrace new technologies and protocols, but only when there's a clear benefit to the user. If you bought your RME interface in the early years of this century, there's a good chance that it is supported today. And if you buy a new RME interface now, you're benefiting from two decades of development that have produced an extremely mature product ecosystem.

The latest fruit of this development is the Fireface UCX II. This supersedes the long-established Fireface UCX, which was reviewed back in *SOS* February 2012.

However, it's perhaps better understood as the little brother of the Fireface UFX II and UFX+ than as a direct descendant of the UCX. Like the UFX II, the UCX II is not only a USB audio interface for Mac OS, Windows and iOS. It's also an extremely well-featured digital mixer that can operate with no computer attached, with full control possible from the front panel. And it's a multitrack recorder, writing interleaved multichannel WAV files to an attached USB drive using RME's established DUREC system.

Now UC It

Likewise, although the UCX II retains the compact 1U half-rack form factor of the original UCX, its layout owes more to the UFX II. Happily, this means that in place of the UCX's primitive two-character LED, there's now a small but colourful and detailed TFT panel that can display detailed meters for all I/O simultaneously, as well as text-based menus. This is a big improvement that, among other

things, makes possible the UCX II's full standalone operation capability.

Front-panel socketry comprises two Neutrik Combo XLR/jack sockets, accommodating mic- and line-level signals, plus two further quarter-inch inputs that can accept line-level signals or act as high-impedance inputs for electric guitars. There's also a single quarter-inch headphone output. On the rear panel, you'll find four further quarter-inch line inputs and six line outputs, plus a locking socket for the external PSU and a comprehensive array of digital I/O. There are 5-pin DIN sockets for MIDI in and out, plus a pair of optical sockets for ADAT Lightpipe, supporting eight inputs and outputs at base sample rates (and switchable to carry stereo S/PDIF if needed). A single BNC connector can act as a word-clock input or output, and a supplied flying cable allows stereo XLR AES3 and phono S/PDIF to be accessed via a nine-pin D-Sub. When RME describe the UCX II as offering "40 channels",

therefore, they mean that it has a total of 20 inputs and 20 outputs.

The UCX II's rear panel also has two USB sockets, in the older A and B formats rather than the current Type C. RME's Matthias Carstens explained that there's no technical advantage to using the newer socket, and that in his experience it is less reliable. The Type B socket is used to make the connection to the host computer; cables are included to connect to either a Type A or C socket. The UCX's own Type A socket has two purposes. It can either be used to connect RME's ARC USB remote control, or to attach a USB drive for direct recording.

The original UCX was a dual-format interface that could connect either via USB or FireWire. The latter format is now effectively superseded by Thunderbolt, but RME haven't bestowed a Thunderbolt socket on the UCX II. This seems to me a sensible enough decision: building in the necessary chipsets and connectors would have raised the price of the unit considerably, and Thunderbolt is still not universally available on desktop or laptop computers. Most importantly, although there is often a clear performance gap between the two formats with other manufacturers' interfaces, RME's USB drivers are so efficient that there is little to be gained by switching. At base sample rates, the UCX II was happy to operate on my 2019 Mac Mini at a 16-sample buffer size, giving an outstandingly low round-trip latency of 2.3ms.

Free Standing

At the heart of the UCX II is an FPGA chip running the latest version of RME's TotalMix FX. This has been discussed and described many times in previous SOS reviews, and it would probably take a book to list all its features; it's no exaggeration to say that TotalMix FX is as capable as many dedicated digital mixers. Each physical output can receive its own dedicated balance of the signals from all the inputs, DAW returns and the built-in reverb and delay. Each physical input and output also has its own EQ and dynamics, as well as controls such as mic preamp gain where appropriate to specific input types. There's also comprehensive monitor control, metering, preset save and recall, grouping, support for remote control and more.

All of this has been part of the RME package for a long time now. What's new compared with the original UCX is full

standalone operation. Eagle-eyed readers will notice that the UCX II is not endowed with faders, gain pots, mute and solo buttons and the other accoutrements of a conventional mixer. When a computer is connected, or when a tablet running RME's TotalMix Remote software can see the UCX II on a Wi-Fi network, this isn't a problem, because everything can be controlled on screen. However, in standalone mode, hands-on control is rather more limited.

To the left of the UCX II's small but detailed meter panel, you'll find four small buttons: to its right, a rotary encoder which also has a push action. Under normal circumstances, the encoder serves as a level control, with the push action switching its focus from your designated monitor outputs to the headphone output. The four buttons each cycle through two menu pages before returning you to the metering view. The first pair of menus enables quick and easy control over preamp gain, while the second activates DUREC recording and playback, and provides control over related parameters. The last pair brings up various setup and routing options, as well as control over the TotalMix reverb and echo.

Mix Mastery

However, the vast majority of TotalMix FX functions are found under the third button, labelled Chan/Mix. On the first press, this brings up a scrolling menu presenting all the global parameters for the selected input channel; settings such as mute, stereo link, polarity, M-S decoding and so on are accessed here. Initially, I thought important options such as phantom power and line/instrument switching weren't available from the UCX II's front panel, because I'd expected to find them among the Mic/Gain settings accessed using the first button. Instead they lurk at the bottom of this menu, and only hove into view when you scroll down.

Pressing Chan/Mix for a second time lets you select a TotalMix mixer page, within which you can then set fader and pan or balance levels for each channel. So, for example, if you have Mix to Line Out 1/2 and Mic 2 selected at the top of this screen, the Fader and Bal/Pan controls further down concern only the level and position of the second mic/line input within the particular mixer that is feeding this output pair.

Needless to say, you wouldn't want to set up a busy mix entirely from the UCX II's front panel, but there are certainly circumstances where this standalone functionality might be useful. For example, if you have a two-track source such as a CD player or master recorder in the studio, you might not want to switch the computer on every time you want to play something back; and in other circumstances, it's not unknown for Wi-Fi to take a dive and rob you of your iPad controller. Standalone operation would rarely be the preferred way to interact with the UCX II, but the full colour display and sensible menu layouts mean there's never any confusion about what you're adjusting at any given time.

At this point you might be thinking: this standalone capability is all very well, but I'm unlikely to need it often, and meanwhile, a single rotary encoder doesn't offer much by way of monitor control. Wouldn't these buttons be more useful if they could be used to activate mute, mono, dim, and so on? Those were my thoughts too, until RME drew my attention to a feature called Key Remap, which is somewhat buried in the UCX's extensive PDF manual. Accessed from the nether reaches of the Setup/Rev menu, it allows you to assign your choice of 20 or so different TotalMix settings

»

RME Fireface UCX II

£1149

PROS

- Extremely powerful built-in mixer with remote control and standalone operation.
- Driver performance that rivals Thunderbolt and PCIe interfaces.
- Good audio specifications and subjective sound quality.
- Small but clear and comprehensive colour display.
- Built-in multitrack recording to an attached USB drive.
- Key Remap allows buttons to be reassigned in useful ways.

CONS

- Comparatively expensive.
- Only two preamps and one headphone socket.
- Talkback and some monitor-control features can't currently be controlled from the front panel.

SUMMARY

The latest version of RME's half-rack interface packs in all of their latest technologies, offering full standalone operation whilst retaining the core virtues for which the company are well known.



■ The TotalMix Remote app is compatible with all iPads going back to the second generation.

» to each of the buttons. Once you've done so, a momentary press toggles this setting, and a sustained press brings up the menu as usual. This works well for functions such as mute, dim and low cut, but at present it can't be assigned to TotalMix features that aren't available in standalone mode, such as talkback and speaker switching. If I was to use the UCX II long-term, I think I'd want to invest in an ARC USB or other hardware controller to access these options.

Future Proof

Like many of RME's interfaces, the UCX II is designed partly as a platform for expansion. Hence, for example, it has only two built-in mic preamps, but offers six line inputs and plenty of digital I/O in case you want to add more. Perhaps uniquely, it permits AES3, coaxial and optical digital I/O to be used simultaneously — whether the latter is set to S/PDIF or ADAT — so there are no caveats to its stated channel count. The on-board preamps use RME's latest design, which offers a 75dB gain range digitally controlled in 1dB steps and sounds very good indeed. The

headphone amp is likewise a cut above what you'd find in many interfaces, and the line-level I/O both specifies well and sounds clean, clear and quiet. The line outputs are DC-coupled, so they can be used to output control voltages to drive modular synths.

Given that you need additional hardware such as the ARC, headphone amps and mic preamps to really exploit all the UCX II's features, though, it's reasonable to ask whether it offers value for money. After all, MOTU's Ultralite Mk5 offers very similar connectivity, with equally impressive audio specifications and an additional headphone output, for little more than half the price; and although it lacks the UCX II's audio recording features, it's functionally similar in other respects. Vary the feature set or form factor a little more, and there's no shortage of competition from other manufacturers, too.

I think RME themselves would be the first to acknowledge that in a race to offer the most ins and outs for the lowest cost, they're simply not participating. Nor does a product like the UCX II have a single, eye-catching headline feature that makes it unique. But there are nevertheless plenty of reasons why people buy RME

interfaces rather than apparently cheaper alternatives. One is the incredible flexibility of a product like the UCX. From built-in M-S decoding to OSC support, from software-switchable word-clock termination to full ASIO Direct Monitoring implementation, it positively bristles with niche features of the 'you don't need this... until you do' variety.

But probably the UCX's biggest selling points are qualities you won't find on feature lists or spec sheets. Product longevity is an oft-neglected but important virtue, and RME have no peers when it comes to supporting older products. Spending a little extra on the UCX might well mean saving much more in the long term. Likewise, although other manufacturers have upped their game in recent years, RME remain the standard by which driver quality is judged. If you want to be certain of getting an interface that's reliable, offers exceptionally low latency and works well with the widest range of host machines, you won't be disappointed. ■■■

£ £1149 including VAT.
W www.synthax.co.uk
W www.rme-audio.de